

(PCT Article 36 and Rule 70)

## INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/EP2004/012231

## Box No. I Basis of the report

1. With regard to the **language**, this report is based on the international application in the language in which it was filed, unless otherwise indicated under this item.
- ☐ This report is based on translations from the original language into the following language \_\_\_\_\_, which is the language of a translation furnished for the purposes of:
- ☐ international search (Rule 12.3 and 23.1(b))
- ☐ publication of the international application (Rule 12.4)
- ☐ international preliminary examination (Rule 55.2 and/or 55.3)
2. With regard to the **elements** of the international application, this report is based on *(replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report)*:
- ☐ the international application as originally filed/furnished
- ☒ the description:
- pages 1-214 as originally filed/furnished
- pages\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_
- pages\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_
- ☒ the claims:
- nos. 2-12, 14-20 as originally filed/furnished
- nos.\* \_\_\_\_\_ as amended (together with any statement) under Article 19
- nos.\* 1, 13 received by this Authority on 29.10.2005 with letter of 28.10.2005
- nos.\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_
- ☐ the drawings:
- sheets \_\_\_\_\_ as originally filed/furnished
- sheets\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_
- sheets\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_
- ☐ a sequence listing and/or any related table(s) – see Supplemental Box Relating to Sequence Listing.
3. ☐ The amendments have resulted in the cancellation of:
- ☐ the description, pages \_\_\_\_\_
- ☐ the claims, nos. \_\_\_\_\_
- ☐ the drawings, sheets/figs \_\_\_\_\_
- ☐ the sequence listing (*specify*): \_\_\_\_\_
- ☐ any table(s) related to sequence listing (*specify*): \_\_\_\_\_
4. ☐ This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).
- ☐ the description, pages \_\_\_\_\_
- ☐ the claims, nos. \_\_\_\_\_
- ☐ the drawings, sheets/figs \_\_\_\_\_
- ☐ the sequence listing (*specify*): \_\_\_\_\_
- ☐ any table(s) related to sequence listing (*specify*): \_\_\_\_\_

\* If item 4 applies, some or all of those sheets may be marked "superseded."

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Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement		
1.	Statement		
	Novelty (N)	Claims <u>1-20</u>	YES
		Claims _____	NO
	Inventive step (IS)	Claims <u>1-20</u>	YES
		Claims _____	NO
	Industrial applicability (IA)	Claims <u>1-20</u>	YES
		Claims _____	NO
2.	Citations and explanations (Rule 70.7)		
1	This report makes reference to the following document:		
	D1: EP-A-0 887 386 (CIBA SPECIALTY CHEMICALS HOLDING INC) 30 December 1998 (1998-12-30)		
2	<u>INDEPENDENT CLAIM 1</u> <b>D1</b> is considered to be the prior art closest to the subject matter of claim 1. D1 (see <b>dye of formula 105</b> and <b>dying instructions II to V</b> ) discloses a method of dyeing cotton fabrics at a pH value above 11 by means of a dye which contains activatable groups that correspond to formula A of the present claim 1.  Thus the subject matter of claim 1 differs from the known method in that leather is dyed, and in that the dyeing process takes place at a pH value of 7.5 to 11. The subject matter of 1 is therefore novel (PCT Article 33(2)).  The problem to be solved by the present invention		

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	<p>can therefore be regarded as that of providing a method for dying leather.</p> <p>The solution to this problem as proposed in claim 1 of the present application involves an inventive step to the following reasons (PCT Article 33(3)):</p> <p>D1 states that the dyes described therein are suitable for dying leather (see <b>page 8, lines 18-24</b>); however, a person skilled in the art would dye the leather according to the examples in D1, i.e. at a pH value of above 11, or under conditions typical for leather, i.e. at slightly acidic pH values. The applicant has shown in additional experiments that the use of dye F at slightly acidic pH values leads to leather with poor perspiration resistance, whereas the use of dye F at pH values between 7.5 and 11 leads to leather with better perspiration resistance. In contrast thereto, dying leather under the conditions specified in D1 (10 g/l calcinated soda) damages the leather.</p> <p>3     <u>DEPENDENT CLAIMS 2 TO 12</u></p> <p>Claims 2 to 12 are dependent on claim 1 and therefore also meet the PCT requirements for novelty and inventive step.</p> <p>4     <u>INDEPENDENT CLAIM 13</u></p> <p><b>D1</b> is considered to be the prior art closest to the subject matter of claim 13. D1 (see <b>dye of formula 105</b> and <b>dying instructions II to V</b>) discloses the use of dyes F according to the</p>

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	<p>present claim 1 for dyeing cotton fabrics at a pH value above 11.</p> <p>Thus the subject matter of 13 differs from the known use in that leather is dyed, and in that the dyeing process is carried out at a pH value of 7.5 to 11.</p> <p>The subject matter of claim 13 is therefore novel (PCT Article 33(2)).</p> <p>The subject matter of claim 13 involves an inventive step for the reasons mentioned above.</p> <p>5     <u>INDEPENDENT CLAIMS 14 AND 15</u></p> <p><b>D1</b> is considered to be the prior art closest to the subject matter of claims 14 and 15. D1 (see <b>page 2, lines 20-38, and dye of formula 105</b>) discloses dyes from which the subject matter of claims 14 and 15 differs in that the group Tk<sup>1</sup> is a diphenyl, diphenylmethane, 2-phenylimidazol, phenylsulfonylbenzene, phenylaminosulfonylbenzene, diphenylamine, stilbene or phenylaminocarbonylbenzene group.</p> <p>The subject matter of claims 14 and 15 is therefore novel (PCT Article 33(2)).</p> <p>The problem to be solved by the present invention can therefore be regarded as that of providing alternative dyes.</p> <p>The solution to this problem as proposed in claims 14 and 15 of the present application involves an</p>

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	<p>inventive step for the following reasons (PCT Article 33(3)): D1 does not mention anything that would suggest using the aforementioned Tk<sup>1</sup> groups instead of the (optionally substituted) phenyl group mentioned in D1 in the dye.</p> <p>6. <u>DEPENDENT CLAIMS 16 TO 18</u></p> <p>Claims 16 to 18 are dependent on claims 14 or 15 and therefore also meet the PCT requirements for novelty and inventive step.</p> <p>7. <u>INDEPENDENT CLAIMS 19 AND 20</u></p> <p>The applicant has shown in additional experiments that the method according to the present claim 1 leads to leather with better perspiration resistance.</p> <p>The subject matter of claims 19 and 20 is therefore novel (PCT Article 33(2)).</p> <p>The subject matter of claims 19 and 20 involves an inventive step for the reasons mentioned above.</p>